

ABSTRACT OF THE DISCLOSURE

VOLUME TRANSLATION APPARATUS AND METHOD

5 A volume translation apparatus and method are
provided. The volume translation apparatus resides
between host machines and the physical storage devices
accessed by the host machines. This volume translation
apparatus may perform volume translation for the control
10 path and optionally the data path of input/output (I/O)
requests sent by the host machines to the physical
storage devices. Control path translation ensures that
the correct physical volumes are mounted for accessing by
the I/O request. Because the physical volume may be
15 different from that requested by the host machine
application, the translation device includes a mapping
that represents which physical volumes represent copies
of the virtual volume used by the host machine
application. When an I/O request is received and is
20 directed to a particular original virtual volume, the
volume mapping apparatus translates the original virtual
volume identification into one or more physical volume
identifications associated with a secondary virtual
volume which may or may not be the same as the original
25 virtual volume.

"100399" 48801